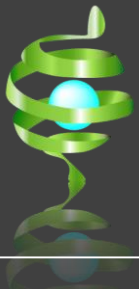


# Rabelais Biomedical Cluster

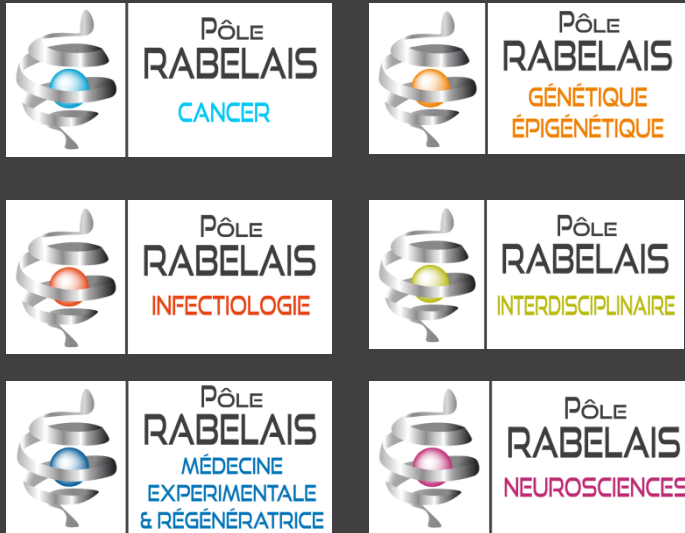
PBSR



31 Laboratories

Technological resources Laboratory

## RESEARCH PROGRAMS



## BIOCAMPUS MONTPELLIER

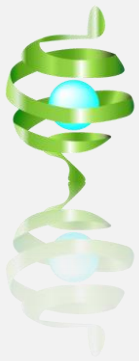
51 technology platforms grouped in 12 facilities

- Technology services
- Expertise
- TRAINING:  
Technology Workshops



<http://www.polebiosante-rabelais.fr/>

# INTERDISCIPLINARY AXIS



PBSR

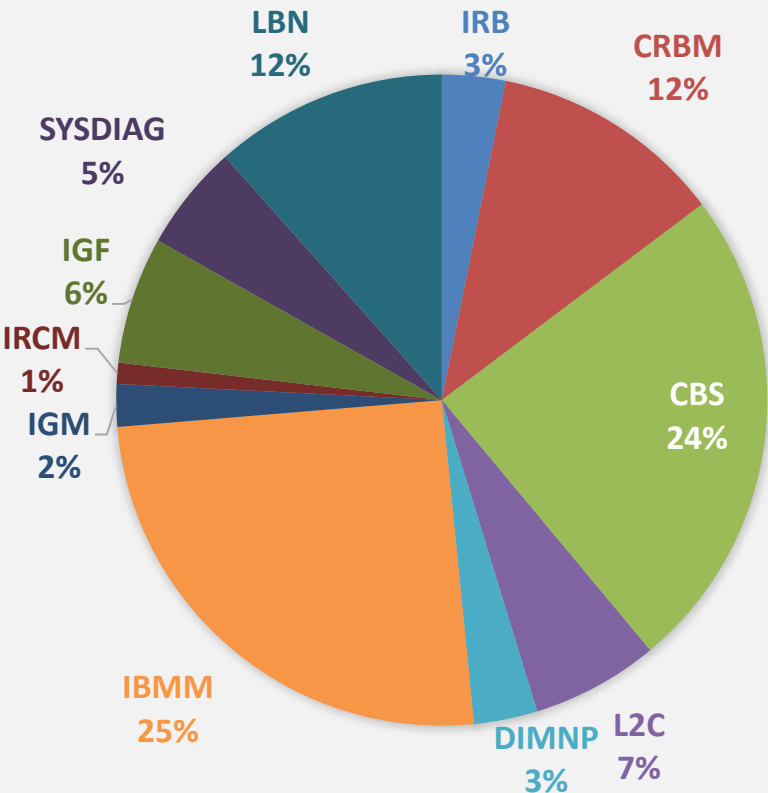


33 research groups distributed in 11 research units

4 Atip-Avenir grants, 4 ERC grants



4 French Government “Investissements d’avenir” projects



**FBI** (France Bio-Imaging)  
**FRISBI** (French Integrated Structural Biology Infrastructure)  
**Bip: Bip** (Structural Bioinformatics)  
**IBC** (Institute of Computational Biology)



## Technology and bioinformatics platforms

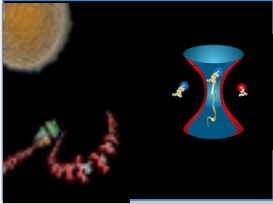
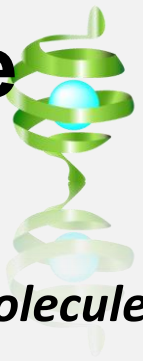
- MARS Super-resolution and optical fluctuation Microscopy
- PIBBS/Biocampus
- SynBio3 Synthesis of Biomolecules
- PPC Proteomics Montpellier/Biocampus
- IMGT®, the international ImMunoGeneTics information system

~100 Researchers

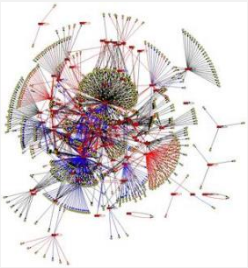


# Rabelais/Interdisciplinary: areas of expertise

PBSR



- **Structural biology** (NMR, crystallography, EM) and **single molecule biophysics** (SRM, FFS, AFM, nanomanipulation).



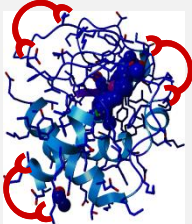
- **Synthetic biology**

- **Design of multifunctional peptides** for targeting and delivering therapeutic molecules.



- **Nanotechnologies** applied to medicine.

- **Multiscale modelling** of biological processes.



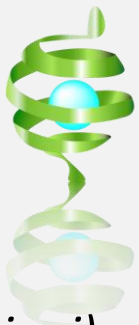
- **New diagnostic approaches** in human healthcare based on bioinformatics methods, integrative and systems biology.



- **Bioinformatics and Systems Biology** tools and algorithms.

# Systems biology, synthetic biology, bioinformatics teams

PBSR



- ***Biological Physics and Systems Biology*** (Ovidiu Radulescu, Andrea Parmeggiani).
- ***Cancer bioinformatics and systems biology*** (Jacques Colinge)
- ***SYSDIAG UMR3145*** (Franck Molina).
- ***Synthetic Biology*** (Jerome Bonnet)
- ***Multiscale Biomolecular modelling*** (Alessandro Barducci)
- ***Structural Bioinformatics and Molecular Modelling*** (Andrey Kajava)
- ***Structure and Screening of Therapeutic and Environmental Targets*** (William Bourguet, Gilles Labesse)
- ***IMGT® - le système d'information internationale en ImMunoGénéTique®*** (Sofia Kossida)
- ***Bioinformatique et biomarqueurs*** (Thérèse Commes)
- ***Computational Biology Institute.***